## WHAT IS CLAIMED IS:

 A composition comprising, in a cosmetically acceptable medium, at least one fluorescent dye that is soluble in said medium, and at least one conditioning polymer that is insoluble in said medium, wherein the at least one conditioning polymer is chosen from polyorganosiloxanes which do not bear an amine group;

and wherein the composition does not comprise, as the at least one fluorescent dye, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium in which the alkyl radical of the pyridinium nucleus is chosen from methyl and ethyl radicals, the alkyl radical of the benzene nucleus represents a methyl radical, and a counterion is a halide.

- 2. A composition according to claim 1, wherein the at least one fluorescent dye provides a reflectance maximum that is in the wavelength range from 500 to 650 nanometers.
- 3. A composition according to claim 2, wherein the at least one fluorescent dye leads to a reflectance maximum that is in the wavelength range from 550 to 620 nanometers.
- 4. A composition according to claim 1, wherein the at least one fluorescent dye is chosen from the fluorescent dyes belonging to the following families: naphthalimides; cationic coumarins; non-cationic coumarins; xanthenodiquinolizines; azaxanthenes; naphtholactams; azlactones; oxazines; thiazines; dioxazines; azo, azomethine, and methine polycationic fluorescent dyes, and mixtures thereof.
- 5. A composition according to claim 1, wherein the at least one fluorescent dye is chosen from following formulae:

in which:

R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are chosen from:

- hydrogen atoms;
- linear and branched alkyl radicals comprising 1 to 10 carbon atoms, wherein
  said alkyl radicals are optionally interrupted with at least one entity chosen
  from hetero atoms and groups comprising at least one hetero atom and
  optionally substituted with at least one entity chosen from hetero atoms,
  groups comprising at least one hetero atom, and halogen atoms;
- aryl and arylalkyl radicals, the aryl groups comprising 6 carbon atoms and the alkyl groups comprising 1 to 4 carbon atoms; the aryl groups optionally being substituted with at least one linear or branched alkyl radical comprising 1 to 4

carbon atoms and optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;

- R<sub>1</sub> and R<sub>2</sub> may optionally be linked so as to form a heterocycle with the nitrogen atom and may comprise at least one other hetero atom, the heterocycle optionally being substituted with at least one linear or branched alkyl radical, optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;
- R<sub>1</sub> or R<sub>2</sub> may optionally form a heterocycle comprising the nitrogen atom and
   one of the carbon atoms of the phenyl group bearing the said nitrogen atom;

R<sub>3</sub> and R<sub>4</sub>, which may be identical or different, are chosen from hydrogen atoms and alkyl radicals comprising 1 to 4 carbon atoms;

R<sub>5</sub>, which may be identical or different, is chosen from hydrogen atoms, halogen atoms, and linear and branched alkyl radicals comprising 1 to 4 carbon atoms, optionally interrupted with at least one hetero atom;

R<sub>6</sub>, which may be identical or different, is chosen from hydrogen atoms; halogen atoms; linear and branched alkyl radicals comprising 1 to 4 carbon atoms, optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;

X is chosen from:

- linear and branched alkyl radicals comprising 1 to 14 carbon atoms and alkenyl radicals comprising 2 to 14 carbon atoms, wherein said alkyl radicals and said alkenyl radicals are optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;
- 5- or 6-membered heterocyclic radicals optionally substituted with at least one
   of

linear or branched alkyl radicals comprising 1 to 14 carbon atoms, optionally substituted with at least one hetero atom;

linear or branched aminoalkyl radicals comprising 1 to 4 carbon atoms, optionally substituted with at least one hetero atom; and

halogen atoms;

- fused or non-fused aromatic or diaromatic radicals, optionally separated with an alkyl radical comprising 1 to 4 carbon atoms, the aromatic or diaromatic radicals optionally being substituted with at least one halogen atom or with at least one alkyl radical comprising 1 to 10 carbon atoms, said at least one alkyl radical optionally substituted and/or optionally interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom;
- dicarbonyl radicals;
- the group X optionally bearing at least one cationic charge;

a is chosen from 0 and 1;

Y, which may be identical or different, is chosen from organic and mineral anions; and

n is an integer at least equal to 2 and at most equal to the number of cationic charges present in the at least one fluorescent dye.

- 6. A composition according to claim 5, wherein  $R_1$  and  $R_2$ , which may be identical or different, are chosen from linear or branched alkyl radicals comprising 1 to 4 carbon atoms.
- 7. A composition according to claim 5, wherein  $R_1$  and  $R_2$ , which may be identical or different, are linked so as to form a heterocycle with the nitrogen atom and comprise at least one other hetero atom, the heterocycle being substituted with at least one linear or branched alkyl radical comprising 1 to 4 carbon atoms.
- 8. A composition according to claim 1, wherein the at least one fluorescent dye is present in an amount ranging from 0.01% to 20% by weight relative to the total weight of the composition.
- 9. A composition according to claim 8, wherein the at least one fluorescent dye is present in an amount ranging from 0.05% to 10% by weight relative to the total weight of the composition.
- 10. A composition according to claim 9, wherein the at least one fluorescent dye is present in an amount ranging from 0.1% to 5% by weight relative to the total weight of the composition.
- 11. A composition according to claim 1, wherein the at least one insoluble conditioning polymer is chosen from silicones in the form of oils, waxes, resins, and gums.
- 12. A composition according to claim 11, wherein the silicones are chosen from cyclic volatile silicones comprising from 3 to 7 silicon atoms, cyclocopolymers, linear volatile silicones comprising from 2 to 9 silicon atoms, non-volatile polyalkylsiloxane, polyarylsiloxane, polyalkylarylsiloxane and polyorganosiloxane silicones modified with

organofunctional groups, grafted silicones comprising a polysiloxane portion and a portion comprising a non-silicone organic chain, and polydiorganosiloxane, organopolysiloxane and trimethylsiloxysilicate resins, and mixtures thereof.

- 13. A composition according to claim 12, wherein the organofunctional groups are chosen from polyethyleneoxy and polypropyleneoxy groups optionally comprising alkyl groups, thiol groups, alkoxylated groups, hydroxylated groups, acyloxyalkyl groups, and carboxylic, sulphonate, and thiosulphate anionic groups.
- 14. A composition according to claim 1, wherein the at least one insoluble conditioning polymer is present in an amount ranging from 0.01% to 20% by weight relative to the total weight of the composition.
- 15. A composition according to claim 14, wherein the at least one insoluble conditioning polymer is present in an amount ranging from 0.1% to 10% by weight relative to the total weight of the composition.
- 16. A composition according to claim 1, further comprising at least one surfactant chosen from nonionic, anionic, and amphoteric surfactants.
- 17. A composition according to claim 16, wherein the surfactant is present in an amount ranging from 0.01% to 30% by weight relative to the total weight of the composition.
- 18. A composition according to claim 1, further comprising at least one non-fluorescent additional direct dye chosen from nonionic, cationic, and anionic direct dyes.
- 19. A composition according to claim 18, wherein the at least one non-fluorescent additional direct dye is chosen from nitrobenzene dyes, azo dyes, anthraquinone dyes, naphthoquinone dyes, benzoquinone dyes, phenothiazine dyes, indigoid dyes, xanthene dyes, phenanthridine dyes, phthalocyanin dyes, and triarylmethane-based dyes.

- 20. A composition according to claim 18, wherein the at least one non-fluorescent additional direct dye is present in an amount ranging from 0.0005% to 12% by weight relative to the total weight of the composition.
- 21. A composition according to claim 20, wherein the at least one non-fluorescent additional direct dye is present in an amount ranging from 0.005% to 6% by weight relative to the total weight of the composition.
- 22. A composition according to claim 1, wherein the composition is in the form of a lightening dyeing shampoo.
- 23. A composition according to claim 1, further comprising at least one oxidation base chosen from para-phenylenediamines, bis(phenyl)alkylenediamines, para-amino-phenols, ortho-aminophenols, heterocyclic bases, and the acid and alkaline addition salts thereof.
- 24. A composition according to claim 23, wherein the at least one oxidation base is present in an amount ranging from 0.0005% to 12% by weight relative to the total weight of the composition.
- 25. A composition according to claim 24, wherein the at least one oxidation base is present in an amount ranging from 0.005% to 6% by weight relative to the total weight of the composition.
- 26. A composition according to claim 23, further comprising at least one coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, heterocyclic couplers, and the acid and alkaline addition salts thereof.
- 27. A composition according to claim 26, wherein the at least one coupler is present in an amount ranging from 0.0001% to 10% by weight relative to the total weight of the composition.

- 28. A composition according to claim 27, wherein the at least one coupler is present in an amount ranging from 0.005% to 5% by weight relative to the total weight of the composition.
- 29. A composition according to claim 1, further comprising at least one oxidizing agent.
- 30. A composition according to claim 29, wherein the at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, and enzymes.
- 31. A composition according to claim 30, wherein the persalts are chosen from perborates and persulphates.
- 32. A composition according to claim 30, wherein the enzymes are chosen from peroxidases, two electron oxidoreductases, and four electron oxidoreductases.
- 33. A composition according to claim 30, wherein the at least one oxidizing agent is hydrogen peroxide.
- 34. A composition according to claim 1, wherein the at least one fluorescent dye compound is a dye in the orange range.
  - 35. A process for dyeing human keratin fibers with a lightening effect, comprising:
  - a) applying a dye composition comprising, in a cosmetically acceptable medium, at least one fluorescent dye that is soluble in said medium, and at least one conditioning polymer that is insoluble in said medium, wherein the at least one conditioning polymer is chosen from polyorganosiloxanes which do not bear an amine group; and wherein the composition does not comprise, as the at least one fluorescent dye, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium in which the

alkyl radical of the pyridinium nucleus is chosen from methyl and ethyl radicals, the alkyl radical of the benzene nucleus represents a methyl radical, and a counterion is a halide

to the said fibers, for a time that is sufficient to develop a desired coloration and lightening;

- b) optionally rinsing the fibers;
- c) optionally washing the fibers with shampoo and optionally rinsing the fibers; and
- d) drying the fibers or leaving the fibers to dry.
- 36. A process for dyeing human keratin fibers with a lightening effect comprising a) separately storing,
  - (i) a dye composition comprising, in a cosmetically acceptable medium, at least one fluorescent dye that is soluble in said medium, and at least one conditioning polymer that is insoluble in said medium, wherein the at least one conditioning polymer is chosen from polyorganosiloxanes which do not bear an amine group;

and wherein the composition does not comprise, as the at least one fluorescent dye, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium in which the alkyl radical of the pyridinium nucleus is chosen from methyl and ethyl radicals, the alkyl radical of the benzene nucleus represents a methyl radical, and a counterion is a halide

- (ii) a composition comprising, in a cosmetically acceptable medium, at least one oxidizing agent,
  - b) mixing (i) and (ii) together at the time of use,
  - c) applying this mixture to the fibers for a time that is sufficient to develop a desired

coloration,

- d) optionally rinsing said fibers
- e) optionally washing said fibers with shampoo and optionally rinsing said fibers, and f) drying said fibers or leaving said fibers to dry.
- 37. A process according to claim 35, wherein the composition is applied to hair with a tone height of less than or equal to 6.
- 38. A process according to claim 37, wherein the composition is applied to hair with a tone height of less than or equal to 4.
- 39. A process according to claim 35, wherein the human keratin fibers are artificially colored and/or pigmented.
  - 40. A process for coloring dark skin with a lightening effect, comprising
- applying to the skin a composition comprising, in a cosmetically acceptable medium,

at least one fluorescent dye that is soluble in said medium, and
at least one conditioning polymer that is insoluble in said medium, wherein
the at least one conditioning polymer is chosen from polyorganosiloxanes which do not
bear an amine group;

and wherein the composition does not comprise, as the at least one fluorescent dye, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium in which the alkyl radical of the pyridinium nucleus is chosen from methyl and ethyl radicals, the alkyl radical of the benzene nucleus represents a methyl radical, and a counterion is a halide; and

- drying the skin or leaving the skin to dry.
- 41. A multi-compartment device for dyeing and/or lightening keratin fibers, comprising

at least one compartment containing a composition comprising, in a cosmetically acceptable medium,

at least one fluorescent dye that is soluble in said medium, and
at least one conditioning polymer that is insoluble in said medium, wherein
the at least one conditioning polymer is chosen from polyorganosiloxanes which do not
bear an amine group;

and wherein the composition does not comprise, as the at least one fluorescent dye, 2-[2-(4-dialkylamino)phenylethenyl]-1-alkylpyridinium in which the alkyl radical of the pyridinium nucleus is chosen from methyl and ethyl radicals, the alkyl radical of the benzene nucleus represents a methyl radical, and a counterion is a halide; and at least one other compartment containing a composition comprising at least one oxidizing agent.

- 42. A process for dyeing keratin materials with a lightening effect comprising applying to keratin materials a dye composition comprising, in a cosmetically acceptable medium, at least one fluorescent dye that is soluble in the said medium and at least one conditioning polymer that is insoluble in the said medium, said at least one conditioning polymer being chosen from polyorganosiloxanes not bearing an amino group.
- 43. A process according to claim 42, wherein the at least one fluorescent dye gives a reflectance maximum that is in the wavelength range from 500 to 650 nanometers.
- 44. A process according to claim 43, wherein the at least one fluorescent dye gives a reflectance maximum that is in the wavelength range from 550 to 620 nanometers.
- 45. A process according to claim 42, wherein the at least one fluorescent dye is chosen from fluorescent compounds belonging to the following families: naphthalimides; cationic coumarins; non-cationic coumarins; xanthenodiquinolizines; azaxanthenes;

naphtholactams; azlactones; oxazines; thiazines; dioxazines; azo, azomethine, and methine type monocationic fluorescent dyes; azo, azomethine, and methine type polycationic fluorescent dyes; and mixtures thereof.

46. A process according to claim 42, wherein the at least one fluorescent dye is chosen from the group formed by the dyes having the following structures:

$$(C_2H_5)_2N$$
 $CH_3$ 
 $(C_2H_5)_2N$ 
 $CH_3$ 
 $(C_2H_5)_2N$ 
 $CH_3$ 
 $(C_2H_5)_2N$ 
 $(C_2H_5)_2N$ 
 $(C_2H_5)_2N$ 
 $(C_2H_5)_2N$ 
 $(C_2H_5)_2N$ 
 $(C_2H_3)_2N$ 
 $(F1)$ 
 $(C_2H_3)_2N$ 
 $(F2)$ 
 $(C_2H_5)_2N$ 
 $(C_2H_3)_2N$ 
 $(F2)$ 
 $(F3)$ 

in which:

 $R_1$  and  $R_2$ , which may be identical or different, are chosen from:

- hydrogen atoms;
- linear and branched alkyl radicals comprising 1 to 10 carbon atoms, wherein said alkyl radicals are optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and

- optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;
- aryl and arylalkyl radicals, the aryl groups comprising 6 carbon atoms and the alkyl groups comprising 1 to 4 carbon atoms; the aryl groups optionally being substituted with at least one linear or branched alkyl radical comprising 1 to 4 carbon atoms wherein said at least one alkyl radical is optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;
- R<sub>1</sub> and R<sub>2</sub> may optionally be linked so as to form a heterocycle with the nitrogen atom and may comprise at least one other hetero atom, the heterocycle optionally being substituted with at least one linear or branched alkyl radical wherein said at least one alkyl radical is optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;
- R<sub>1</sub> or R<sub>2</sub> may optionally form a heterocycle comprising the nitrogen atom and one of the carbon atoms of the phenyl group bearing the said nitrogen atom;

R<sub>3</sub> and R<sub>4</sub>, which may be identical or different, are chosen from hydrogen atoms and alkyl radicals comprising 1 to 4 carbon atoms;

R<sub>5</sub>, which may be identical or different, is chosen from hydrogen atoms, halogen atoms, and linear or branched alkyl radicals comprising 1 to 4 carbon atoms, optionally interrupted

with at least one hetero atom;

R<sub>6</sub>, which may be identical or different, is chosen from hydrogen atoms; halogen atoms; linear or branched alkyl radicals comprising 1 to 4 carbon atoms, wherein said alkyl radicals are optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;

## X is chosen from:

- linear and branched alkyl radicals comprising 1 to 14 carbon atoms and alkenyl radicals comprising 2 to 14 carbon atoms, wherein said alkyl radicals and said alkenyl radicals are optionally interrupted with at least one entity chosen from hetero atoms and groups comprising at least one hetero atom and optionally substituted with at least one entity chosen from hetero atoms, groups comprising at least one hetero atom, and halogen atoms;
- 5- or 6-membered heterocyclic radicals optionally substituted with at least one
   of

linear or branched alkyl radicals comprising 1 to 14 carbon atoms, optionally substituted with at least one hetero atom;

linear or branched aminoalkyl radical comprising 1 to 4 carbon atoms, optionally substituted with at least one hetero atom; and

halogen atoms;

fused or non-fused aromatic or diaromatic radicals, optionally separated with an alkyl radical comprising 1 to 4 carbon atoms, the aromatic or diaromatic radicals optionally being substituted with at least one halogen atom or with at

least one alkyl radical comprising 1 to 10 carbon atoms optionally substituted and optionally interrupted with at least one entity chosen from hetero atoms and groups bearing at least one hetero atom;

- dicarbonyl radicals;
- the group X optionally bearing at least one cationic charge;

a is chosen from 0 and 1;

Y<sup>-</sup>, which may be identical or different, is chosen from organic and mineral anions; and n is an integer at least equal to 2 and at most equal to the number of cationic charges present in the at least one fluorescent dye:

$$R'$$
 $R'$ 
 $R'$ 
 $R'$ 
 $R'$ 
 $R'$ 

in which formula R is chosen from methyl and ethyl radicals; R' is a methyl radical and X is an anion.

- 47. A process according to claim 46, wherein R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are chosen from linear and branched alkyl radicals comprising 1 to 4 carbon atoms.
- 48. A process according to claim 46, wherein R<sub>1</sub> and R<sub>2</sub>, which may be identical or different, are linked so as to form a heterocycle with the nitrogen atom and comprise at least one other hetero atom, the heterocycle being substituted with at least one linear or branched alkyl radical comprising 1 to 4 carbon atoms.
- 49. A process according to claim 46, wherein X is an anion chosen from chloride, iodide, sulphate, methasulphate, acetate, and perchlorate.

50. A process according to claim 43, wherein the keratin materials are artificially colored and/or pigmented keratin fibers.

- 51. A process according to claim 50, wherein the keratin material is hair.
- 52. A process according to claim 50, wherein the keratin material is dark skin.
- 53. A process according to claim 51, wherein the hair has a tone height of less than or equal to 6.
- 54. A method according to claim 53, wherein the hair has a tone height of less than or equal to 4.